What is claimed is:

1. A procurement analysis system comprising:

a network interface to interface with one or more data sources over a network to receive procurement data;

a data storage device to store model building data sets determined from the procurement data;

a model generator module, executed by a processor, to determine procurement scoring models from the model building data sets and to store the procurement scoring models in the data storage, wherein the procurement scoring models comprise a price risk scoring model, a supplier risk scoring model and an item risk scoring model and the procurement risk analysis module determines a scoring scale of scores associated with each procurement scoring model and determines a threshold for each scale identifying a high-risk procurement, wherein the scoring scale and the threshold is the same for each the scoring model;

a procurement risk analysis module, executed by the processor, to determine an evaluation capacity to review bids for a procurement, and to evaluate bids for the procurement based on the procurement scoring models and the evaluation capacity to identify high-risk procurements associated with the evaluated bids; and

a dashboard comprised of a graphical user interface to provide illustrations of price risk, supplier risk and item risk for the bids based on the evaluation of the bids.

2. The system of claim 1, wherein the dashboard graphically illustrates scores for the bids based on the evaluation of the bids and presents information for each bid that is selectable for drill downs to display additional information describing a risk profile for each bid.

3. The system of claim 1, wherein the procurement risk analysis module is to evaluate the bids by determining, for each bid, a price risk score, a supplier risk score, and an item risk score based on the price risk scoring model, the supplier risk scoring model and the item risk scoring model, respectively, wherein each score is on the scoring scale; and comparing each score to the threshold to determine if each bid is associated with a high-risk procurement.

4. The system of claim 3, wherein the procurement risk analysis module is to determine the price score for each bid by determining a cost savings for each bid; sorting the bids based on the cost savings; selecting a subset of the bids less than a total number of the bids based on the sorting according to the cost savings and based on the evaluation capacity; assigning a price score equivalent to the threshold for a bid in the subset having a lowest cost savings; calculating a score weighting for each bid in the subset by determining a natural log of the cost savings for the bid and dividing by the threshold; and determining the price score for each remaining bid in the subset based on the weighting.

5. A procurement analysis system comprising:

a network interface to interface with one or more data sources over a network to receive procurement data;

a data storage device to store model building data sets determined from the procurement data;

a model generator module, executed by a processor, to determine procurement scoring models from the model building data sets and store the models in the data storage; and

a procurement risk analysis module, executed by the processor, to determine an evaluation capacity to review bids for a procurement, and to evaluate bids for the procurement based on the procurement scoring models and the evaluation capacity to identify high-risk procurements associated with the evaluated bids.

6. The system of claim 5, wherein the procurement scoring models comprise a price risk scoring model, a supplier risk scoring model and an item risk scoring model and the procurement risk analysis module determines a scoring scale of scores associated with each procurement scoring model and determines a threshold for each scale identifying a high-risk procurement, wherein the scoring scale and the threshold is the same for each the scoring model.

7. The system of claim 6, wherein the procurement risk analysis module determines, for each bid, a price risk score, a supplier risk score, and an item risk score based on the price risk scoring model, the supplier risk scoring model and the item risk scoring model, respectively, wherein each score is on the scoring scale, and the procurement risk analysis module compares each score to the threshold to determine if each bid is associated with a high-risk procurement.

8. The system of claim 7, wherein procurement risk analysis module determines a cost savings for each bid, sorts the bids based on the cost savings, selects a subset of the bids less than a total number of the bids based on the sorting according to the cost savings and based on the evaluation capacity, assigns a price score equivalent to the threshold for a bid in the subset having a lowest cost savings, calculates a score weighting for each bid in the subset by determining a natural log of the cost savings for the bid and dividing by the threshold, and determines the price score for each remaining bid in the subset based on the weighting.

9. The system of claim 8, wherein the procurement risk analysis module applies logistic regression to the supplier risk data set to determine the supplier risk score for each bid in the subset.

10. The system of claim 8, wherein procurement risk analysis module applies business rules to each bid in the subset to determine if a risk condition is true or false, and determines a number of true risk conditions and multiplies by a predetermined value to determine the item risk score for each bid in the subset.

11. The system of claim 8, comprising a dashboard to present a highest score as a level of risk for each bid, wherein if the highest score exceeds the threshold, the bid is identified as a high-risk bid.

12. A method of identifying high-risk procurements comprising:

interfacing with one or more data sources over a network to receive procurement data;

creating a data structure in a data storage device to store at least some of the procurement data;

storing model building data sets in the data structure in the data storage device, wherein the model building data sets are determined from the procurement data;

determining procurement scoring models from the model building data sets;

determining an evaluation capacity to review bids for a procurement; and

evaluating, by a processor, bids for the procurement based on the procurement scoring models and the evaluation capacity to identify high-risk procurements associated with the evaluated bids.

13. The method of claim 12, comprising:

determining a scoring scale of scores associated with each procurement scoring model; and

determining a threshold for each scale identifying a high-risk procurement, wherein the scoring scale and the threshold is the same for each procurement scoring model.

14. The method of claim 13, wherein determining the threshold comprises determining the threshold based on the evaluation capacity.

15. The system of claim 14, wherein evaluating the bids comprises:

determining, for each bid, a price risk score, a supplier risk score, and an item risk score based on the price risk scoring model, the supplier risk scoring model and the item risk scoring model, respectively, wherein each score is on the scoring scale; and comparing each score to the threshold to determine if each bid is associated with a high-risk procurement.

16. The method of claim 15, wherein determining the price score for each bid comprises:

determining a cost savings for each bid;

sorting the bids based on the cost savings;

selecting a subset of the bids less than a total number of the bids based on the sorting according to the cost savings and based on the evaluation capacity;

assigning a price score equivalent to the threshold for a bid in the subset having a lowest cost savings;

calculating a score weighting for each bid in the subset by determining a natural log of the cost savings for the bid and dividing by the threshold; and

determining the price score for each remaining bid in the subset based on the weighting.

17. The method of claim 15, wherein determining the supplier risk score for each bid comprises:

applying logistic regression to the supplier risk data set to determine the supplier risk score for each bid in the subset.

18. The method of claim 15, wherein determining the item risk score for each bid comprises:

applying business rules to each bid in the subset to determine if a risk condition is true or false; and

determining a number of true risk conditions and multiplying by a predetermined value to determine the item risk score for each bid in the subset.

19. The method of claim 15, comprising:

determining a highest score of the scores for each bid;

presenting the highest score as a level of risk for the bid via a user interface, wherein if the highest score exceeds the threshold, identifying the bid as a high-risk bid.

20. The method of claim 15, further comprising:

presenting the scores via a user interface, wherein each score is selectable for drill down to identify information for each score.

What is claimed is:

1. A procurement analysis system including:

a network interface to interface with one or more data sources over a network to receive procurement data;

a data storage device to store model building data sets determined from the procurement data;

a model generator module, executed by a processor, to determine procurement scoring models from the model building data sets and to store the procurement scoring models in the data storage,

wherein the procurement scoring models include a price risk scoring model, a supplier risk scoring model and an item risk scoring model and the procurement risk analysis module determines a scoring scale of scores associated with each procurement scoring model and determines a threshold for each scale identifying a high-risk procurement, wherein the scoring scale and the threshold is the same for each the scoring model;

a procurement risk analysis module, executed by the processor, to determine an evaluation capacity to review bids for a procurement, and to evaluate bids for the procurement based on the procurement scoring models and the evaluation capacity to identify high-risk procurements associated with the evaluated bids; and

a dashboard including a graphical user interface to provide illustrations of price risk, supplier risk and item risk for the bids based on the evaluation of the bids.

2. A system according to claim 1, wherein the dashboard graphically illustrates scores for the bids based on the evaluation of the bids and presents information for each bid that is selectable for further analysis to display additional information describing a risk profile for each bid.

3. A system according to either claim 1 or claim 2, wherein the procurement risk analysis module evaluates the bids by determining, for each bid, a price risk score, a supplier risk score, and an item risk score based on the price risk scoring model, the supplier risk scoring model and the item risk scoring model, respectively, wherein each score is on the scoring scale; and comparing each score to the threshold to determine if each bid is associated with a high-risk procurement.

4. A system according to claim 3, wherein the procurement risk analysis module determines the price score for each bid by determining a cost savings for each bid; sorting the bids based on the cost savings; selecting a subset of the bids less than a total number of the bids based on the sorting according to the cost savings and based on the evaluation capacity;

assigning a price score equivalent to the threshold for a bid in the subset having a lowest cost savings; calculating a score weighting for each bid in the subset by determining a natural log of the cost savings for the bid and dividing by the threshold; and determining the price score for each remaining bid in the subset based on the weighting.

5. A procurement analysis system including:

a network interface to interface with one or more data sources over a network to receive procurement data;

a data storage device to store model building data sets determined from the procurement data;

a model generator module, executed by a processor, to determine procurement scoring models from the model building data sets and store the models in the data storage; and

a procurement risk analysis module, executed by the processor, to determine an evaluation capacity to review bids for a procurement, and to evaluate bids for the procurement based on the procurement scoring models and the evaluation capacity to identify high-risk procurements associated with the evaluated bids.

6. A system according to claim 5**,** wherein the procurement scoring models include a price risk scoring model, a supplier risk scoring model and an item risk scoring model and the procurement risk analysis module determines a scoring scale of scores associated with each procurement scoring model and determines a threshold for each scale identifying a high-risk procurement, wherein the scoring scale and the threshold is the same for each the scoring model.

7. A system according to claim 6**,** wherein the procurement risk analysis module determines, for each bid, a price risk score, a supplier risk score, and an item risk score based on the price risk scoring model, the supplier risk scoring model and the item risk scoring model, respectively, wherein each score is on the scoring scale, and the procurement risk analysis module compares each score to the threshold to determine if each bid is associated with a high-risk procurement.

8. A system according claim 7, wherein the procurement risk analysis module determines a cost savings for each bid, sorts the bids based on the cost savings, selects a subset of the bids less than a total number of the bids based on the sorting according to the cost savings and based on the evaluation capacity, assigns a price score equivalent to the threshold for a bid in the subset having a lowest cost savings, calculates a score weighting for each bid in the subset by determining a natural log of the cost savings for the bid and dividing by the threshold, and determines the price score for each remaining bid in the subset based on the weighting.

9. A system according to claim 8, wherein the procurement risk analysis module applies logistic regression to the supplier risk data set to determine the supplier risk score for each bid in the subset.

10. A system according to either claim 8 or claim 9, wherein the procurement risk analysis module applies business rules to each bid in the subset to determine if a risk condition is true or false, and determines a number of true risk conditions and multiplies by a predetermined value to determine the item risk score for each bid in the subset.

11. A system according to any one of claims 8 to 10, including a dashboard to present a highest score as a level of risk for each bid, wherein if the highest score exceeds the threshold, the bid is identified as a high-risk bid.

12. A method of identifying high-risk procurements including:

interfacing with one or more data sources over a network to receive procurement data;

creating a data structure in a data storage device to store at least some of the procurement data;

storing model building data sets in the data structure in the data storage device, wherein the model building data sets are determined from the procurement data;

determining procurement scoring models from the model building data sets;

determining an evaluation capacity to review bids for a procurement; and

evaluating, by a processor, bids for the procurement based on the procurement scoring models and the evaluation capacity to identify high-risk procurements associated with the evaluated bids.

13. A method according to claim 12, including:

determining a scoring scale of scores associated with each procurement scoring model; and

determining a threshold for each scale identifying a high-risk procurement, wherein the scoring scale and the threshold is the same for each procurement scoring model.

14. A method according to claim 13, wherein determining the threshold includes determining the threshold based on the evaluation capacity.

15. A system according to claim 14, wherein evaluating the bids includes:

determining, for each bid, a price risk score, a supplier risk score, and an item risk score based on the price risk scoring model, the supplier risk scoring model and the item risk scoring model, respectively, wherein each score is on the scoring scale; and

comparing each score to the threshold to determine if each bid is associated with a high-risk procurement.

16. A method according to claim 15, wherein determining the price score for each bid includes:

determining a cost savings for each bid;

sorting the bids based on the cost savings;

selecting a subset of the bids less than a total number of the bids based on the sorting according to the cost savings and based on the evaluation capacity;

assigning a price score equivalent to the threshold for a bid in the subset having a lowest cost savings;

calculating a score weighting for each bid in the subset by determining a natural log of the cost savings for the bid and dividing by the threshold; and

determining the price score for each remaining bid in the subset based on the weighting.

17. A method according to either claim 15 or claim 16**,** wherein determining the supplier risk score for each bid includes:

applying logistic regression to the supplier risk data set to determine the supplier risk score for each bid in the subset.

18. A method according to any one of claims 15 to 17, wherein determining the item risk score for each bid includes:

applying business rules to each bid in the subset to determine if a risk condition is true or false; and

determining a number of true risk conditions and multiplying by a predetermined value to determine the item risk score for each bid in the subset.

19. A method according to any one of claims 15 to 18, including:

determining a highest score of the scores for each bid;

presenting the highest score as a level of risk for the bid via a user interface, wherein if the highest score exceeds the threshold, identifying the bid as a high-risk bid.

20. A method according to any one of claims 15 to 19, further including:

presenting the scores via a user interface, wherein each score is selectable for drill down to identify information for each score.

21. A procurement analysis system according to either claim 1 or claim 5, or a method according to claim 12, substantially as hereinbefore described with reference to the accompanying figures.